Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-50. (canceled)

51. (Previously presented) An image forming apparatus comprising:

a heat-generating member;

a pressure member pressed against the heat-generating member;

a magnetization coil for heating the heat-generating member through electromagnetic induction;

an inverter circuit for supplying a high-frequency current to the magnetization coil;

a control unit for controlling an operation of the inverter circuit; and

a temperature sensor for detecting a temperature of the heat-generating member,

wherein both the temperature sensor and a nip portion formed between the heat-generating member and the pressure member are arranged at a portion other than a portion of the heat-generating member that is heated most by the magnetization coil.

52. (Previously presented) The image forming apparatus according to claim 51, wherein the temperature sensor is positioned in the vicinity of the nip portion formed between the heat-generating member and the pressure member.

53. (New) The image forming apparatus according to claim 51, wherein the temperature sensor is positioned at a portion in which the heat-generating member and the pressure member

oppose each other and on a heat-generating member side with respect to a recording material fed to the nip portion formed between the heat-generating member and the pressure member.

54. (Previously presented) The image forming apparatus according to claim 51, wherein the temperature sensor is provided at a portion on an upstream side from the nip portion formed between the heat-generating member and the pressure member in a direction in which a recording material is fed.

55. (Previously presented) The image forming apparatus according to claim 51, wherein the magnetization coil is arranged in opposition to an outer peripheral surface of the heat-generating member.

56. (Previously presented) An image forming apparatus comprising:

a heat-generating member;

a pressure member pressed against the heat-generating member;

a magnetization coil for heating the heat-generating member through electromagnetic induction;

an inverter circuit for supplying a high-frequency current to the magnetization coil;

a control unit for controlling an operation of the inverter circuit; and

a temperature sensor for detecting a temperature of the heat-generating member,

wherein a portion of the heat-generating member that is heated most by the magnetization coil, the temperature sensor, a nip portion formed between the heat-generating member and the pressure member are at positions different from one another.

57. (Previously presented) The image forming apparatus according to claim 56, wherein the temperature sensor is positioned in the vicinity of the nip portion formed between the heat-generating member and the pressure member.

58. (Previously presented) The image forming apparatus according to claim 56, wherein the temperature sensor is positioned at a portion in which the heat-generating member and the pressure member oppose each other and on a heat-generating member side with respect to a recording material fed to the nip portion formed between the heat-generating member and the pressure member.

59. (Previously presented) The image forming apparatus according to claim 56, wherein the temperature sensor is provided at a portion on an upstream side from the nip portion formed between the heat-generating member and the pressure member in a direction in which a recording material is fed.

60. (Previously presented) The image forming apparatus according to claim 56, wherein the magnetization coil is arranged in opposition to an outer peripheral surface of the heat-generating member.

61. (Previously presented) An image forming apparatus comprising:

a rotatable heat-generating body;

a pressure member pressed against a portion of the heat-generating body;

a magnetization coil for heating the heat-generating body through electromagnetic induction;

an inverter circuit for supplying a high-frequency current to the magnetization coil;

a control unit for controlling an operation of the inverter circuit; and

a temperature sensor for detecting a temperature of the heat-generating body,

wherein a portion of the heat-generating body that is heated most by the magnetization coil is on an upstream side from a nip portion formed between the heat-generating body and the pressure member in a rotating direction of the heat-generating body, and the temperature sensor is arranged on a downstream side from the nip portion in the rotating direction of the heat-generating body.

62. (Previously presented) The image forming apparatus according to claim 61, wherein the heat-generating body comprises a fixing belt, and the temperature sensor is arranged on a side of a rear surface of the fixing belt.

63. (Previously presented) The image forming apparatus according to claim 61, wherein the heat-generating body comprises a heat-generating roller, a fixing roller pressed against the pressure member, and a fixing belt suspended between the heat-generating roller and the fixing roller.

64. (Previously presented) The image forming apparatus according to claim 61, wherein the magnetization coil is arranged in opposition to an outer peripheral surface of the heat-generating body.

65. (Previously presented) An image forming apparatus comprising:

a rotatable heat-generating body;

a pressure member pressed against a portion of the heat-generating body;

a magnetization coil for heating the heat-generating body through electromagnetic induction;

an inverter circuit for supplying a high-frequency current to the magnetization coil;

a control unit for controlling an operation of the inverter circuit; and

a temperature sensor for detecting a temperature of the heat-generating body,

wherein a portion of the heat-generating body that is heated most by the magnetization coil is on either an upstream side or a down stream side from a nip portion formed between the heat-generating body and the pressure member in a rotating direction of the heat-generating body, and the temperature sensor is positioned on a side different from the side on which the portion of the heat-generating body that is heated most is provided.

66. (Previously presented) The image forming apparatus according to claim 65, wherein the heat-generating body comprises a fixing belt, and the temperature sensor is positioned on a side of a rear surface of the fixing belt.

67. (Previously presented) The image forming apparatus according to claim 65, wherein the heat-generating body comprises a heat-generating roller, a fixing roller pressed against the pressure member, and a fixing belt suspended between the heat-generating roller and the fixing roller.

68. (Previously presented) The image forming apparatus according to claim 65, wherein the magnetization coil is arranged in opposition to an outer peripheral surface of the heat-generating body.

69. (Previously presented) An image forming apparatus comprising:

a rotatable heat-generating body;

a pressure member pressed against a portion of the heat-generating body;

a magnetization coil for heating the heat-generating body through electromagnetic induction;

an inverter circuit for supplying a high-frequency current to the magnetization coil;

a control unit for controlling an operation of the inverter circuit; and

a temperature sensor for detecting a temperature of the heat-generating body,

wherein a portion of the heat-generating body that is heated most by the magnetization coil and the temperature sensor are at different positions on an upstream side from a nip portion formed between the heat-generating body and the pressure member in a rotating direction of the heat-generating body.

70. (Previously presented) The image forming apparatus according to claim 69, wherein the heat-generating body comprises a fixing belt, and the temperature sensor is arranged on a side of a rear surface of the fixing belt.

71. (Previously presented) The image forming apparatus according to claim 69, wherein the heat-generating body comprises a heat-generating roller, a fixing roller pressed against the pressure member, and a fixing belt suspended between the heat-generating roller and the fixing roller.

72. (Previously presented) The image forming apparatus according to claim 69, wherein the magnetization coil is arranged in opposition to an outer peripheral surface of the heat-generating body.

73. (Previously presented) An image forming apparatus comprising:

a rotatable heat-generating body;

a pressure member pressed against a portion of the heat-generating body;

a magnetization coil for heating the heat-generating body through electromagnetic induction;

an inverter circuit for supplying a high-frequency current to the magnetization coil;

a control unit for controlling an operation of the inverter circuit; and

a temperature sensor for detecting a temperature of the heat-generating body,

wherein a portion of the heat-generating body that is heated most by the magnetization coil and the temperature sensor are at different positions on either an upstream side or a down stream side from a nip portion formed between the heat-generating body and the pressure member in a rotating direction of the heat-generating body.

74. (Previously presented) The image forming apparatus according to claim 73, wherein the heat-generating body comprises a fixing belt, and the temperature sensor is arranged on a side of a rear surface of the fixing belt.

75. (Previously presented) The image forming apparatus according to claim 73, wherein the heat-generating body comprises a heat-generating roller, a fixing roller pressed against the pressure member, and a fixing belt suspended between the heat-generating roller and the fixing roller.

76. (Previously presented) The image forming apparatus according to claim 73, wherein the magnetization coil is arranged in opposition to an outer peripheral surface of the heat-generating body.